REMARKS

Applicant appreciates the thorough examination of the present application as evidenced by the Office Action mailed September 10, 2007 (hereinafter "Office Action"). In response, Applicant has amended independent Claims 1, 20, 22, 41, 43, and 62 to clarify that the translation system or the instruction system is independent of MPLS lookup tables used to define label switched paths. Applicant respectfully submits that the cited reference fails to disclose or suggest, at least, all of the recitations of independent Claims 1, 20, 22, 41, 43, and 62, as amended. Accordingly, Applicant submits that all pending claims are in condition for allowance. Favorable reconsideration of all pending claims is respectfully requested for at least the reasons discussed hereafter.

Independent Claims 1, 20, 22, 41, 43, and 62 are Patentable

Independent Claims 1, 20, 22, 41, 43, and 62 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U. S. Patent No. 7,031,607 to Smith (hereinafter "Smith") in view of Official Notice taken with regard to public knowledge regarding the operation of conventional Multiprotocol Label Switching (MPLS) networks. (Office Action, pages 2 and 3). Independent Claim 1 is directed to a method of processing an MPLS packet and recites, in part:

> receiving an MPLS packet having first header information comprising at least a first MPLS label at a first MPLS network node;
> operating a translation system to obtain second header information comprising at least a second MPLS label, the translation system being independent of MPLS lookup tables used to define label switched paths;
> modifying the MPLS packet with the second header information; and
> routing the MPLS packet to a second MPLS network node based on the second header information. (Emphasis added).

Independent Claims 22 and 43 include similar recitations. As highlighted above, independent Claim 1 has been amended to further clarify that the translation system is independent of the MPLS lookup tables that are used to define label switched paths. As explained in paragraphs

37 - 39 on pages 8 and 9 of the Specification, the translation system may be used to enable a network node to act as a redirection point for packet traffic. Rather than necessarily follow a current label switched path defined by the lookup table at the receiving network node, the translation system may be used to redirect the packet to another node, which may even be in a network that does not share the same MPLS label space as the receiving node. (Specification, paragraph 38).

Similarly, independent Claim 20 is also directed to a method of processing an MPLS packet and recites, in part:

> receiving an MPLS packet having first header information comprising at least a first MPLS label at a first MPLS network node;
>
> obtaining operating instructions from an instruction system for the first MPLS network node responsive to the first header information, the instruction system being independent of MPLS lookup tables used to define label switched paths; and
>
> operating the first MPLS network node based on the operating instructions. (Emphasis added).

Independent Claims 41 and 62 include similar recitations. As explained in paragraph 41 on page 9 of the Specification, "... the translation/instruction system 225 may be operated to generate operating instructions for the first MPLS node. The first MPLS node may be operated in accordance with these instructions/directives to, for example, mirror packets to a monitoring port, log packet and/or flow information, change the quality of service associated with the traffic, and/or perform some other function."

The Office Action cites various passages from col. 2, lines 11 - 42 of Smith along with Official Notice regarding known operations of MPLS networks as disclosing the recitations of independent Claim 1. (Office Action, pages 2 and 3). The passage from Smith, however, merely describes conventional operations for routing packets in an MPLS network along a label switched path. "The labels effectively define the LSP in the MPLS domain to carry the packets." (Smith, col. 2, lines 14 - 15). As is known to those skilled in the art, in a conventional MPLS network, such as that described in the "Background" section of Smith, when a labeled packet is received by an MPLS router, the topmost label is examined. Based on the contents of the label an operation can be performed on the packet's label stack. MPLS

routers have lookup tables that tell them what kind of operation to do based on the topmost label of the incoming packet so they can process the packet quickly.

In sharp contrast, independent Claim 1 describes the translation system as being independent of the MPLS lookup tables that are used to define label switched paths in the network. This can allow a node that receives a packet to redirect to the packet to another node in the MPLS network or even to another node that uses a different MPLS label space.

Turning next to independent Claim 20, the Office Action cites the description in Smith regarding the ability of a network manager/operator to participate in setting up explicitly routed LSP as disclosing the recited instruction system. (Office Action, page 3). Smith explains at col. 2, lines 42 - 57 that a network operator may engineer a set-up message to specify an LSP route in a network. In sharp contrast, Claim 20 recites obtaining operating instructions from an instruction system in response to the first header information in a received packet. Moreover, the instruction system is independent of the MPLS lookup tables used to define label switched paths. Thus, while the network management operation system used by a network administrator may be independent of the label switched paths in the network, the nodes do not access the network management operation system in response to receiving a packet as recited in Claim 20. Rather the network management operation system is used to engineer label switched paths in advance before using them to carry packet traffic.

For at least the foregoing reasons, Applicant respectfully submits that independent Claims 1, 20, 22, 41, 43, and 62 are patentable over the cited references, and that dependent Claims 2 – 19, 21, 23 - 40, 42, 44 - 61, and 63 are patentable at least by virtue of their depending from an allowable claim.

Various Dependent Claims are Separately Patentable

Dependent Claims 3, 18, 24, 39, 45, and 60 include all the recitations of independent Claims 1 or 22, and are, therefore, patentable for at least the reasons described above. Dependent Claims 3, 18, 24, 39, 45, and 60 further specify that the first and second MPLS networks are in different MPLS networks or that the translation system is external to the first

and second MPLS nodes. As discussed above, Smith merely discloses a conventional MPLS network in which routing lookup tables are stored at the various nodes in the MPLS network. All of the routing tables use the same MPLS label space. Thus, Smith does not disclose or suggest using a translation system that facilitates packet routing between different MPLS networks. Moreover, Smith does not disclose a translation system that is external to the MPLS network nodes. Accordingly, Applicant submits that dependent Claims 3, 18, 24, 39, 45, and 60 are separately patentable for at least these additional reasons.

Dependent Claims 21, 42, and 63 include all the recitations of independent Claims 20, 41, and 62, respectively, and are, therefore, patentable for at least the reasons described above. Dependent Claims 21, 42, and 63 further specify that the instruction system is external to the MPLS node. As discussed above, the network management operation system described in Smith at col. 2, lines 42 - 57 is not an instruction system that operates responsive to receiving a packet. Applicant submits that Smith fails to disclose or suggest obtaining operating instructions from an instruction system that is external to an MPLS network node in response to the first header information in a received packet. Accordingly, Applicant submits that dependent Claims 21, 42, and 63 are separately patentable for at least these additional reasons.

CONCLUSION

In light of the above amendments and remarks, Applicant respectfully submits that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (919) 854-1400.

Respectfully submitted,

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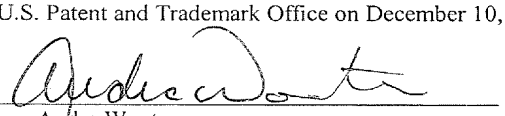
Signature: 
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